



Drugs and Alcohol Today

Vaporizing the pot world - easy, healthy, and cool

Pekka Hakkarainen

Article information:

To cite this document:

Pekka Hakkarainen , (2016), "Vaporizing the pot world – easy, healthy, and cool", Drugs and Alcohol Today, Vol. 16 Iss 3 pp. 185 - 193

Permanent link to this document:

<http://dx.doi.org/10.1108/DAT-10-2015-0062>

Downloaded on: 14 November 2016, At: 02:13 (PT)

References: this document contains references to 37 other documents.

To copy this document: permissions@emeraldinsight.com

The fulltext of this document has been downloaded 45 times since 2016*

Users who downloaded this article also downloaded:

(2016), "A tale of two epidemics: drugs harm reduction and tobacco harm reduction in the United Kingdom", Drugs and Alcohol Today, Vol. 16 Iss 3 pp. 203-211 <http://dx.doi.org/10.1108/DAT-03-2016-0007>

(2016), "Prostitution policy, morality and the precautionary principle", Drugs and Alcohol Today, Vol. 16 Iss 3 pp. 194-202 <http://dx.doi.org/10.1108/DAT-03-2016-0009>

Access to this document was granted through an Emerald subscription provided by emerald-srm:563821 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

Vaporizing the pot world – easy, healthy, and cool

Pekka Hakkarainen

Pekka Hakkarainen is a Research Professor at Alcohol and Drugs Unit, National Institute for Health and Welfare (THL), Helsinki, Finland.

Abstract

Purpose – The purpose of this paper is to study vaporizers – especially the vape pen – as a new technology in cannabis use. Until now, almost all information on the use of vaporizers or e-cigarettes for cannabis consumption has come from the internet, the popular press, and accounts by users, but not from the scientific literature. More research is needed.

Design/methodology/approach – Since scientific studies of the phenomenon are virtually non-existent, the author will also base his study on sociological reflections upon internet sites and articles published both in subcultural and mainstream media. The author will document a national estimate of the prevalence of vaping based on a recent population survey in Finland.

Findings – Vaping is an emerging trend in cannabis culture internationally. It has been seen as a healthier route of administration than traditional ways of smoking cannabis. Other images, created especially with the help of advanced high-tech machinery and stylish and fashionable designs for the vape pen, are aiming at being cool and easy to use. In Finland, 6 percent of cannabis users make regular use of a vaporizer, and around a quarter of users use one occasionally. A vape pen or e-cigarette was regularly used by 2.6 percent and occasionally by 9.1 percent of cannabis users.

Originality/value – The trend of increasing vaping and the use of new devices has not been properly recognized among researchers. The paper presents some original results from a national population survey.

Keywords New technology, Cannabis, E-cigarette, Cannabis culture, Vape pen, Vaporizer

Paper type Research paper

Introduction

“Vaporizers, e-cigs of the pot world, are booming,” wrote *USA Today* (2014). The *New York Times* (2014), even went a step further when it declared a generational shift in cannabis culture: “Joints are for grandparents. A vaporizer pen, or e-cigarette, is how many people ‘smoke’ weed these days.” In the past few years these kinds of reports have been published frequently in newspapers and other popular press. According to these accounts, a technological transformation in devices has created a new expansive pot industry that is challenging traditional ways of smoking cannabis. Furthermore, the rise of marijuana vaporizers coincides with the recent development of new types of concentrated cannabis extractions in liquid, viscous, and waxy forms. Some models of vaporizer pen are for concentrates, some for herb and some fit both the use of herb and concentrates[1] (*High Times*, 2015).

Obviously, the invention of the electronic cigarette has had a decisive impact on the development of the cannabis vaping pen. These changes have emerged over a very short period of time. It was in 2003 that the electric cigarette was patented, and 2004 when the manufacture and sale of products was started by a Chinese company. The e-cigarette was introduced into Europe and North America around 2007-2008 (Stimson *et al.*, 2014). However, even though cannabis in liquid form can be used with an e-cigarette, it does not appear to be a very appealing form of

Received 27 October 2015
Revised 7 January 2016
Accepted 16 March 2016

cannabis use (Etter, 2015). Hence, the expansion of e-cigarettes has been more significant as a trigger for the development of special models of electronic vaporizers, which are more suitable for cannabis use than e-cigs.

Another general determinant accelerating the development of new technology for cannabis use has been the legalization of cannabis either for medical use or recreational use from 1997 onwards in several US states. The point here is that the dissolution of legal barriers has created a fertile ground for commercial interests and investments in the development and marketing of new cannabis technology. Recently, new devices and concentrates have become easily available in medical and recreational cannabis dispensaries (e.g. Loflin and Earleywine, 2014).

In the field of tobacco, Stimson *et al.* (2014), referring to business science, describe the e-cigarette as a “disruptive innovation,” which, by the definition of the concept, can “lead to relatively rapid and dramatic transformation in manufacture [*sic.*], marketing and consumer behavior.” In fact, they equate the rise of the e-cigarette to the emergence of cigarettes in the late 1800s and early 1900s. As we know, a manufactured cigarette was an invention that initiated the development of what Wolfgang Schivelbusch (1986), a German social historian, calls “the triumph of tobacco.” Consequently, it gives reason to ask whether a rapid technological development in new kinds of inhaling devices might lead to a radical change in cannabis consumption. Will the future of cannabis culture be written with the vape pen?

Currently, almost all information on the use of vaporizers or e-cigarettes for cannabis consumption comes from the internet, from the popular press, and from user accounts, though not from the scientific literature (Giroud *et al.*, 2015). Indeed, only a couple of small studies have looked at experiences of vaporizer or e-cigarette cannabis users (Malouff *et al.*, 2014; Etter, 2015), the use of vaporizers and concentrates among older cannabis users (Lau *et al.*, 2015; Murphy *et al.*, 2015), the characteristics of devices and concentrates (Giroud *et al.*, 2015), the harm reduction potential of vaping (Abrams *et al.*, 2007; Earleywine and Barnwell, 2007; van Dam and Earleywine, 2010), and user’s experiences with butane hash oil (BHO) (Loflin and Earleywine, 2014). Considering the low volume of research, it seems clear that the development and marketing of new technology has appeared so rapidly and unexpected that it has not yet been widely recognized among researchers. However, a growing concern in the public health community is noticeable of late (Budney *et al.*, 2015; Fischer *et al.*, 2015; Cox, 2015).

In this paper, I will study this new technology for cannabis use from the point of view of the social construction of images inspired by a theoretical tradition started by Berger and Luckman (1966). My approach also falls into the areas of cultural studies and the sociology of consumption (see e.g. Bourdieu, 1984; Campbell, 1987). Since scientific studies of the phenomenon are still almost non-existent I will base my study also on sociological reflections upon internet sites and articles published both in subcultural and mainstream media. In addition I will present, for the first time, a national estimate on the prevalence of vaping based on a recent population survey in Finland. Despite the lack of systematic documentation, I will suggest that the increased use of vaporizers, especially vape pens, is a new emerging trend in the use of cannabis. Hence, the paper is aiming at enhancing awareness and generating discussion and studies regarding this sudden and rapidly growing phenomenon. Focussing on the perceived benefits of vaping, the technology, the marketing of devices, as well as the growing popularity of concentrates, I will argue that what makes the use of the vape pen an attractive option instead of smoking is that this new technology of ingestion is seen as easy, healthy, and cool.

A healthier high

In their study Malouff *et al.* (2014) point out that individuals using a vaporizer see four advantages over smoking: perceived health benefits, better taste, no smoke smell, and more effect from the same amount of marijuana. Indeed, vaporizers, which heat the plant or concentrate without igniting it and without mixing it with tobacco, seem to reduce the potential for respiratory problems and thus, offer a less harmful mode of administration than smoking joints, blunts, pipes, or water pipes (Abrams *et al.*, 2007; Earleywine and Barnwell, 2007; Giroud *et al.*, 2015). Due to these advantages, vaporizing has potential as a harm reduction technique (Van Dam and Earleywine, 2010). Basically, the argument is similar to that made for e-cigarettes in the tobacco

field (Klein, 2013). In a sense, vaporizers can be seen as the e-cigs of the pot world, as stated by *USA Today* (2014).

The emergence of vaporizers coincides with an ongoing decrease in tobacco smoking in developed countries. In this context, changing from smoking to vaping may reduce a concern about the harms of smoking, at least among those cannabis users who are health-conscious. For example, many medical cannabis patients prefer a vaporizer over smoking (Reinarman *et al.*, 2011). Vaporizing concentrates was seen as less harmful than smoking also among those older cannabis users who had moved from smoking to vaping (Murphy *et al.*, 2015). Likewise, Etter (2015) found that among vapers, vaping was perceived as a healthier way of delivering cannabis than smoking. Moreover, vaporizers are more suitable for cannabis users who are non-smokers.

However, since regular users of cannabis use cannabis less frequently than regular cigarette users use tobacco it results in comparatively fewer concerns for lung cancer and other lung disease among cannabis smokers (Budney *et al.*, 2015). In addition to that tobacco has greater harms to lung health than cannabis smoking (Tashkin, 2015). Furthermore, toxicity of smoke may vary between different ways of smoking cannabis and depending on that whether or not it is mixed with tobacco. While the respiratory health benefits of switching from smoking to vaping cannabis may be relatively minor compared to switching from burning tobacco to e-cigarettes, the image of vaping cannabis is seen as a move toward being more healthy.

Technological fancy

While the popularity of e-cigarettes cannot be reduced to their harm reduction potential (Bell, 2013), similarly background triggers can also be found for the increased attractiveness of vaporizers. I would argue that another prompt is the fascination with advanced technology that comes with new devices. The top model among the new devices is the vaporizer pen (“vape pen”). It is a user-friendly (portable, compact, and versatile) product that represents a sophisticated new technology and elegant design. These features turn out to be evident when comparing the vape pen to some other types of vaporizers (Figure 1).

Even though giving just a very small sample of the huge variety, Figure 1 shows that there are many different kinds of vaporizers on the market, from very simple and even self-made devices to more complicated and high-tech models. Different models may have their own gains and benefits. For example, a German product, Volcano (also called the “Mercedes Benz” of

Figure 1 Examples of different types of vaporizers



vaporizers), with its plastic container, is described as a great home model and brilliant party device (*The Daily Beast*, 2010). However, none of the other models can compete with the vape pen for practicality and style. In a way, the situation resembles the development of mobile phones in the direction of more handy and versatile models (Figure 2).

The last picture in Figure 1 shows the winner of *High Times*' vaporizer pen test of 2013, the Atmos Raw. It was rated with "a perfect score – almost unanimous 5s all across the board." "The fact that it is possible to use it for flowers as well as concentrates without having to change the tank makes it one of the most versatile units," the magazine stated. The pen is manufactured from aluminum and stainless steel. The heating of the stainless steel coil ranges from 375 to 450°F (291–232°C). The kit includes a standard battery unit; a ceramic-lined tank; a rubber mouthpiece with a ceramic filter, a USB charger and adapter, a packing/dabbing tool, a cleaning brush, and two replacement coils. The only criticism made by the magazine was that "the power button was a little too stealthy" (*High Times*, 2013).

High Times is not the only magazine within the cannabis culture running vaporizer tests (see e.g. *Kannabisuutiset*, 2013, a journal of the Finnish Cannabis Association). However, it might have the widest circulation globally and to date, it is likely the only one having an annual review focussing solely on vape pens. Nevertheless, the thoroughness of the test-setting used by *High Times* is impressive. In 2015, a panel of 27 judges scored more than 100 models for such criteria as: heat delivery (flowers) and atomizer quality (concentrates), hit/pull, aftertaste, durability, stealth, button quality, mouthpiece quality, style/design, ease of refill and packaging (*High Times*, 2015).

What is interesting is that in addition to several technical details and the quality of the high, the style/design criterion receives quite a lot of attention in the descriptions of devices. That includes assessments like "sleek and simple design," "compact retro carrying case," "gun metal color," "a nice box and a great look," "elegant," "good, solid design," "hand-blown glass mouthpiece (Beautiful)," "scored high in heady design points," "groovy in a futuristic, high-tech way," etc. In some other forums, style and design may be even more important. For example, vape pens may be presented as fashionable accessories. There are also producers who market their sparkly devices to females. More generally, they are trying to rebrand the cannabis user from a "loser stoner" to a "cool fashionista" (Mic, 2015). "You can say goodbye to worrying lighters, and feel all high-tech," writes *Bustle* (2015).

Figure 2 Development of the models of mobile phones



One important advantage of using a vaporizer is that it is more discreet than smoking, as it does not create the smoke smell (Malouff *et al.*, 2014; Etter, 2015). In particular, a vape pen that uses oil or wax is more or less odorless. As Murphy *et al.* (2015, p. 305) quotes one of their subjects: "I like this pen because it is convenient. It's odorless and people don't know what the hell I'm doing." Hence, these new devices appeal to the demand for privacy and individualism. Vape pens are highly suitable for those who wish to consume cannabis without detection by others (*USA Today*, 2014). It can therefore reduce the fear of the police and stigmatization. It also widens the scope of options for using cannabis in public. Actually, "these products are getting so sophisticated that they can be used anywhere, at any time" (Allen St. Pierre, executive director of NORML, *The Daily Beast*, 2010). An illustration of this, for example, is a story of a man who vapes at the opera (*The Daily Beast*, 2014).

Taking together the advanced technology, the compact and fascinating design, and its discreet use, it seems reasonable to conclude that a vital image constructed for the vape pen can be seen as creating a sense of cool.

Potent concentrates

As previously mentioned, the rise of vaporizers coincides with the emergence of new forms of concentrated cannabis extractions available on the market[2]. These extracts in liquid, viscous or waxy forms are created through extracting resins from marijuana plants by means of liquid butane (Krauss *et al.*, 2015). The outcome is a substance with a significantly higher THC concentration compared to customary forms of cannabis (Giroud *et al.*, 2015; Loflin and Earleywine, 2014). Consequently, a popular, wax-like concentrate, BHO is called the "whiskey of weed" (*High Times*, 2014).

Given the higher potency, the use of concentrates has increased in popularity especially among medicinal cannabis users (Loflin and Earleywine, 2014). In general, concentrated preparations are more expensive or harder to find, but provide a stronger or more efficient high (Murphy *et al.*, 2015).

The popularity of concentrates seems to be growing (Loflin and Earleywine, 2014; Murphy *et al.* 2015). For example, in Colorado the percentage of extracts and concentrates on sale has been rising steadily. In 2014, some local dispensaries did roughly half of their business in herb products, and the rest in edibles and concentrates, with some prepackaged in cartridges for use in vape pens (*USA Today*, 2014). The upbeat development will continue if we believe Mark Kleiman, a professor of public policy and a well-known consultant on cannabis legalization, who has stated that "concentrated extracts will eventually eclipse traditional marijuana in the state's new recreational pot-industry" (*Seattle Times*, 2014).

One reported advantage of vaping over smoking is that a user can get more effect from the same amount of substance (Malouff *et al.*, 2014; *Bustle*, 2015). Using concentrates with a vape pen also seems more practical and discreet than dabbing with a blowtorch. Furthermore, concentrates prepackaged in cartridges for use in vape pens make consumption of cannabis very easy. On the other hand, users have reported only relatively slight disadvantages to vaping, such as from having to charge batteries, clean the tube, and the time it takes to get the device operating (Malouff *et al.*, 2014). All in all, vaping is seen as an easy activity.

Prevalence of vaping

According to *High Times* (2015), the flag bearer of cannabis culture, vaping is now the hottest way to get high, and "the meteoric rise of vape-pen technology shows no signs of slowing down." In fact, it is difficult to estimate an actual prevalence for vaping and vape pen use, since nobody knows the true numbers (Budney *et al.*, 2015; Fischer *et al.*, 2015).

However, it seems obvious that a wide variety of new cannabis products and delivery methods have emerged in the market, at least in the USA (Murphy *et al.*, 2015). For example, in the *High Times* (2015), the magazine tested more than 100 devices, compared to 32 in 2014 and 17 in 2011, the year in which devices were reviewed for the first time. Furthermore, marketing of vape pens on the internet has exploded. For example, an information retrieval with the search term

“cannabis vape pen” conducted by the author of this paper in September 12, 2015, yielded 468,000 hits in Google and 19,800 hits for YouTube videos (see also Giroud *et al.*, 2015). These changes in the market are certainly important, but it would also be good to know how widespread the use of new devices actually is?

In his study, Etter (2015) concludes that while vaping is an emerging practice, it does not seem to be very frequent among cannabis users. He justifies his conclusion with the fact that he did not succeed in reaching more than 55 respondents in his web survey between December 2013 and May 2014. However, one may question whether those internet sites (the smoking cessation website Stop-Tabac.ch and the cannabis cessation website Stop-Cannabis.ch) he used for recruiting were the most suitable for establish contacts with active cannabis users. Murphy *et al.* (2015) who studied delivery systems among older cannabis users in the San Francisco Bay Area noted that smoking was still the most often used route of administration for 91 percent of the respondents, though their sample was relatively small ($n = 97$) and selected according to target group.

To obtain a wider coverage we added a question about the routes of administration in the population survey on drugs in 2014 in Finland. The study was a representative survey based on a random-sample ($n = 7,000$) of the Finnish population aged 15-69 years (Hakkarainen *et al.*, 2015). The respondents were first asked to answer the survey online, and in the case of no response, they were sent three separate reminders with an opportunity to answer also via a paper questionnaire. The responses were returned anonymously. A total of 3,485 persons took part in the survey, constituting a response rate of 50 percent. Results about the route of administration among past-year cannabis users ($n = 209$) are presented in Table I.

Table I clearly shows that smoking is still the main route of administration among Finnish cannabis users. However, 6 percent of cannabis users usually use a vaporizer, and around one fourth do it occasionally. The vape pen or e-cigarette was regularly used as a delivery method by 2.6 and occasionally by 9.1 percent of cannabis users. The fact that figures for vape pen/e-cigarette use are not higher may reflect national policies on drugs and tobacco. Finland operates a restrictive drug policy, and even personal use of cannabis and other drugs is criminalized and punishable by sanctions (Kainulainen, 2009). This also limits possibilities for the open marketing of new cannabis technology. A vaporizer can of course be ordered from the internet, though the variety of devices available on Finnish sites are very limited compared to the North American market. E-cig devices are not very visible in Finnish markets, since the sale of e-cigarette products containing nicotine is prohibited. Regarding concentrated forms of cannabis, hashish is a typical product in Finnish drug markets, but new extracts like BHO are still largely unknown (Niemi and Kainulainen, 2015). Hence, conditions in Finland differ radically from those in the USA and especially in Colorado and Washington, and it can be supposed that figures for vape pen use might be higher there than in Finland – at least if we believe media articles (e.g. *USA Today*, 2014). Nevertheless, the fact that the emerging trend of vaping has got some footing even in the farthest corners of Northern Europe tells about the international character of the cannabis culture. The 2014 population survey also creates a baseline for us to monitor the development of vaping in Finland in the coming years.

Conclusion and discussion

Despite the lack of scientific research, it seems reasonable to conclude that vaping is an emerging trend in the cannabis culture internationally. In the past few years, the rise of vape pen technology

Table I The routes of administration for cannabis (%)

	<i>Usually</i>	<i>Occasionally</i>	<i>Never</i>	<i>Missing</i>
Smoking	87.9	8.0	1.6	2.6
Vape pen/e-cig	2.2	7.8	75.8	14.2
Other vaporizer	3.9	23.0	60.0	13.1
Eating	2.2	22.4	65.2	10.2

Note: $n = 210$

and the introduction of other new cannabis products in the market have been striking. The cannabis vape pen is a copycat of the e-cigarette. Accordingly, the use of vaporizers has been understood to be healthier than traditional ways of smoking cannabis. However, the growing popularity of vaporizers cannot be reduced to their harm reduction technology. Other contributory causes also exist. The importance of images and social meanings attached to vape pen use as cool and easy, created with the help of advanced high-tech machinery and with stylish and fashionable designs, should especially not be underestimated. For example, following Pierre Bourdieu (1984) it could be said that a great number of devices with new high-tech aesthetics imposed on consumption renew the field of taste and distinction (identification) in cannabis markets.

In the longer run, the significance of these three images might even grow in importance. If the prevalence of smoking continues to decrease, it will create more demand for alternatives: e-cigarettes for smokers and vape pens for cannabis users. On the other hand, if the ongoing trend of legalizing cannabis in the USA, which has opened the doors for commercial interests in the development of a new cannabis industry, were to continue and spread to other countries, it will accelerate and intensify investments in the manufacture and marketing of new cannabis technology. In this scenario, it is a very real possibility that the future of cannabis culture will be written by the vape pen.

This development raises many questions. Does the expansion of vape pen use really represent a disruptive technology and lead to a dramatic transformation in consumer behavior? Consequently, does this mean that modern and advanced technology pushed by commercial market interests is penetrating traditional cannabis culture as shaped by the hippie-era? What will happen to the rituals of sharing (Zimmerman and Wieder, 1977)? In Murphy *et al.*'s (2015, p. 305) study, a subject tells that "if you smoke a joint, everybody wants a hit." He has acquired a custom that he vaporizes concentrates in private settings and shares only flowers in social settings. On the other hand, another subject in the same study had only minimal exposure to vaporizers, since he liked the rituals of smoking. While there is not a single culture of cannabis consumption, it can be asked whether the vape pen will bring the etiquette of cigarette smoking into the pot world and will the development indicate an increased privatization and individualization of using habits? Furthermore, do the fancy devices tempt young people to experiment and do the models targeted at different target groups bring new users into the field? Does all this lead to a higher prevalence of cannabis use? An interesting question also is if cannabis use through discreet utilization of vape pen will spread to all kinds of social situations and, hence, become more and more a part of everyday life.

To date, we can generate more questions than we can offer answers. Further research is urgently required. We need detailed studies, for example, on the social characteristics and intentions of vapers, their cannabis histories and use habits as well as on the social and private settings of vaping. It would be especially interesting to learn more about the discreet public uses of these devices. We should also seek to know more about user preferences regarding herb and concentrates. Similarly, we need more detailed knowledge of users' perceptions on health and other risks regarding smoking versus vaping. A question of general interest would be users' reasons for switching to vaping or for starting vaping having previously been non-users of cannabis and how these choices are linked to the images of easy, healthy, and cool. Furthermore, to be able to understand the emerging trend and its dynamics we should get a clearer picture of the actual prevalence of vaping. Therefore, questions about the routes of administration and the use of different forms of cannabis products should be included in surveys and monitoring systems. Correspondingly, we require studies on the economics, structure, and development of the cannabis industry and marketing as well as on the impacts of different kinds of regulatory policies on the market.

A sign of an unsettled field of study is that the terminology around devices and concentrates is in the main quite vague. It would be good to limit the use of "e-cigarette" to those devices marketed to tobacco smoking, while a "vape pen" would be used to refer to portable, pen-like, electronic vaporizers developed for cannabis use. However, the unity of terminology relating to the consumption of concentrates is also challenging, since some producers have entitled vape pens for concentrates with names directly referencing dabbing (e.g. "Dr Dabber Ghost," "The Daborizer" or The Dab OTG"). This also reveals how the whole scene is changing more rapidly than the vocabulary can be established.

Notes

1. Another new method of using concentrated forms of cannabis that has become relatively popular in the USA is called “dabbing” where a “dab” of butane hash oil (BHO) is placed on the end of a glass or titanium rod that has been heated to a high temperature, typically with a blowtorch, with the resulted vapor inhaled (*High Times*, 2014; Loflin and Earleywine, 2014; Krauss *et al.*, 2015).
2. Other and more traditional concentrates like *hashish* and *kief* have been popular for centuries (Murphy *et al.*, 2015).

References

- Abrams, D.I., Vizoso, H.P., Shade, S.B., Jay, C., Kelly, M.E. and Benowitz, N.L. (2007), “Vaporization as a smokeless cannabis delivery system: a pilot study”, *Clinical Pharmacology & Therapeutics*, Vol. 82 No. 5, pp. 57-8.
- Bell, K. (2013), “Tobacco control, harm reduction and the problem of pleasure”, *Drugs and Alcohol Today*, Vol. 13 No. 2, pp. 111-8.
- Berger, P. and Luckman, T. (1966), *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, Anchor Books, Garden City, NY.
- Bourdieu, P. (1984), *Distinction: A Social Critique of the Judgement of Taste*, Routledge, London.
- Budney, A.J., Sargent, J.D. and Lee, D.C. (2015), “Vaping cannabis (marijuana): parallel concerns to e-cigs?”, *Addiction*, Vol. 110 No. 11, pp. 1699-704.
- Bustle (2015), “Lifestyle: 7 reason to vaporize weed instead of smoking it you modern woman you”, April 20, available at: www.bustle.com/articles/77073-7-reasons-to-vaporize-weed-instead-of-smoking-it-you-modern-woman-you (accessed October 6, 2015).
- Campbell, C. (1987), *The Romantic Ethic and the Spirit of Modern Consumerism*, Blackwell, Oxford.
- Cox, B. (2015), “Can the research community respond adequately to the health risks of vaping?”, *Addiction*, Vol. 110 No. 11, pp. 1708-9.
- (The) Daily Beast (2010), “How rich people smoke pot”, *The Daily Beast*, July 2, available at: www.thedailybeast.com/articles/2010/02/07/how-rich-people-smoke-pot.html (accessed August 20, 2014).
- (The) Daily Beast (2014), “This is your e-cigarette on drugs”, *The Daily Beast*, July 28, available at: www.thedailybeast.com/articles/2014/07/28/this-is-your-e-cigarette-on-drugs.html (accessed August 20, 2014).
- Earleywine, M. and Barnwell, S.S. (2007), “Decreased respiratory symptoms in cannabis users who vaporize”, *Harm Reduction Journal*, Vol. 4 No. 11, pp. 1-4.
- Etter, J.-F. (2015), “Electronic cigarettes and cannabis: an explanatory study”, *European Addiction Research*, Vol. 21 No. 3, pp. 124-30.
- Fischer, B., Russell, C. and Tyndall, M.W. (2015), “Cannabis vaping and public health – some comments on relevance and implications”, *Addiction*, Vol. 110 No. 11, pp. 1704-5.
- Giroud, C., de Cesare, M., Berthet, A., Varlet, V., Conca-Lozano, N. and Favrat, B. (2015), “E-cigarettes: a review of the new trends in cannabis use”, *International Journal of Environmental Research and Public Health*, Vol. 12 No. 8, pp. 9988-10008.
- Hakkarainen, P., Karjalainen, K., Ojajarvi, A. and Salasuo, M. (2015), “Huumeiden ja kuntodopingin käyttö ja niitä koskevat mielipiteet Suomessa vuonna 2014 (Drug use, doping and public opinion in Finland: results from the 2014 Drug Survey)”, *Yhteiskuntapolitiikka*, Vol. 80 No. 4, pp. 319-33.
- High Times* (2013), “Vaporizer pen buyer’s guide 2013”, *High Times*, March 27, available at: www.hightimes.com/read/high-times-vaporizer-pen-buyers-guide (accessed September 6, 2014).
- High Times* (2014), “2014 Dab report: breaking dab”, *High Times*, June 18, available at: www.hightimes.com/culture/2014-dab-report-breaking-dab/ (accessed August 18, 2015).
- High Times* (2015), “Vaporizer pen buyer’s guide 2015”, *High Times*, June 29, available at: www.hightimes.com/culture/high-times-2015-vape-pen-buyers-guide/ (accessed August 24, 2015).
- Kainulainen, H. (2009), *Huumeiden käyttäjien rikosoikeudellinen kontrolli (Criminal Control of Drug Users)*, National Research Institute of Legal Policy, Helsinki.

- Kannabisuutiset* (2013), "Vaporisaattorivertailu – katsaus höyryverhon taakse (Vaporizer test – a review)", *Kannabisuutiset*, February 28, available at: www.kannabisuutiset.wordpress.com/2013/02/28/vaporisaattorivertailu-katsaus-hoyryverhon-taakse/ (accessed March 25, 2014).
- Klein, A. (2013), "Editorial: tobacco harm reduction – a new opportunity or a step too far?", *Drugs and Alcohol Today*, Vol. 13 No. 2, pp. 71-2.
- Krauss, M.J., Sowles, S.J., Mylvagaanam, S., Zewdie, K., Bierut, L.J. and Cavazos-Rehg, P.A. (2015), "Displays of dabbing marijuana extracts on YouTube", *Drugs and Alcohol Dependence*, Vol. 155 No. 1, pp. 45-51, available at: <http://dx.doi.org/10.1016/j.drugalcdep.2015.08.020>
- Lau, N., Sales, P., Averill, S., Murphy, F., Sato, S.-O. and Murphy, S. (2015), "Responsible and controlled use: older cannabis users and harm reduction", *International Journal of Drug Policy*, Vol. 26 No. 8, pp. 709-18.
- Loflin, M. and Earleywine, M. (2014), "A new method of cannabis ingestion: the dangers of dabs?", *Addictive Behaviors*, Vol. 39 No. 10, pp. 1430-3.
- Malouff, J.M., Rooke, S.E. and Copeland, J. (2014), "Experiences of marijuana-vaporizer users", *Substance Abuse*, Vol. 35 No. 2, pp. 127-8.
- Mic (2015), "Say hello to fashion vapes, the latest trend that can totally get you high", September 30, available at: <http://mic.com/articles/125997/fashion-vapes-are-the-latest-trend-that-can-get-you-high> (accessed October 7, 2015).
- Murphy, F., Sales, P., Murphy, S., Averill, S., Lau, N. and Sato, S.-O. (2015), "Baby Boomers and cannabis delivery systems", *Journal of Drug Issues*, Vol. 45 No. 3, pp. 293-313.
- Niemi, H. and Kainulainen, H. (2015), "Huumausaine-, alkoholi ja dopingrikokset (Drug, alcohol and doping crimes)", *Rikollisuustilanne 2014 (Crime trends in Finland)*, Institute of Criminology and Legal Policy, University of Helsinki, Helsinki, pp. 185-96.
- New York Times* (2014), "The great Colorado weed experiment", *New York Times*, August 2, available at: www.nytimes.com/2014/08/03/opinion/sunday/high-time-the-great-colorado-weed-experiment.html?_r=0 (accessed September 8, 2014).
- Reinarman, C., Nunberg, H., Lanthier, F. and Heddleston, T. (2011), "Who are medical marijuana patients? Population characteristics from nine California assessment clinics", *Journal of Psychoactive Drugs*, Vol. 43 No. 2, pp. 128-35.
- Schievelbusch, W. (1986), *Nautintoaineiden kulttuurihistoria (Tastes of Paradise: A Social History of Spices, Stimulants, and Intoxicants)*, Otava, Helsinki.
- Seattle Times* (2014), "Amateur hash-oil production, explosions bound to continue", *Seattle Times*, February 8, available at: www.seattletimes.com/seattle-news/amateur-hash-oil-production-explosions-bound-to-continue/ (accessed September 17, 2014).
- Stimson, G.V., Thom, B. and Costall, P. (2014), "Editorial: disruptive innovations: the rise of the electronic cigarette", *International Journal of Drug Policy*, Vol. 25 No. 4, pp. 653-5.
- Tashkin, D.P. (2015), "How beneficial is vaping cannabis to respiratory health compared to smoking?", *Addiction*, Vol. 110 No. 11, pp. 1706-7.
- USA Today* (2014), "Vaporizers, e-cigs of the pot world, are booming", *USA Today*, March 17, available at: www.usatoday.com/story/money/business/2014/03/15/marijuana-vaporizing-gains/6042675/ (accessed March 25, 2014).
- Van Dam, N.T. and Earleywine, M. (2010), "Pulmonary function in cannabis users: support for a clinical trial of the vaporizer", *International Journal of Drug Policy*, Vol. 21 No. 6, pp. 511-3.
- Zimmerman, D.H. and Wieder, D.L. (1977), "You can't help but get stoned. Notes on the social organization of marijuana smoking", *Social Problems*, Vol. 25 No. 2, pp. 198-207.

Corresponding author

Pekka Hakkarainen can be contacted at: pekka.hakkarainen@thl.fi

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgroupublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com

This article has been cited by:

1. KleinAxel Axel Klein StothardBlaine Blaine Stothard Centre for Health Services Studies, University of Kent, Canterbury, UK Independent Prevention Specialist, Blaine Stothard Consultancy, UK . 2016. Editorial. *Drugs and Alcohol Today* **16**:3, 181-184. [[Citation](#)] [[Full Text](#)] [[PDF](#)]